REMARKS

The non-final Office Action dated February 28, 2008 has been carefully reviewed and the foregoing amendments and following remarks are made in response thereto. Applicants acknowledge with appreciation the allowance of claim 1. Claims 1-11 and 15-18 were pending in the application when the non-final Office Action was issued. Claims 2, 7, 15, and 18 have been amended to further clarify the present invention and new claims 19-21 have been added. Claim 2 has been amended to remove reference to complements of the recited sequences and to include fragments of the recited promoter sequences that have functional promoter activity. Explicit support for this amendment can be found in the specification at page 3, lines 8-10 and page 7, lines 3-5. Claim 7 has been amended to clarify that the DNA sequence of interest is a RNAi expression construct. Support for this amendment can be found at page 14, lines 21-28. Claim 15 has been amended to specify that the plant cell is transformed with the genetic construct of claim 4 and that the DNA sequence of interest in the genetic construct comprises the gene responsible for a desired function or phenotype. Support is found in the paragraph bridging pages 13 and 14 and also at page 6, lines 14-27. The amendment to step (b) of claim 15 recites that the cultivation step of the plant cell into a transgenic plant includes expression of the gene in the genetic construct. Claim 18 has been amended to clarify that the isolated polynucleotide sequence is a particular x-mer of either SEQ ID NO: 12 or SEQ ID NO: 113. Support for these amendments are found in the specification at page 16, lines 16-27 and page 12, line 31 to page 13, line 5.

Support for new claim 19 can be found in previously pending claim 2. Applicants note that SEQ ID NO: 12, SEQ ID NO: 60, SEQ ID NO: 113, and nucleotides 1019-1643 of SEQ ID NO: 113, all contain nucleotides 1525-1643 of SEQ ID NO: 113, which is known to have vascular tissue-specific cOMT promoter activity (see page 8 of response dated October 30, 2007). Support for new claim 20 can be found at page 15, lines 10-16 of the specification. Further, new claim 21 recites specific portions of SEQ ID NO: 113 and is supported in the specification on page 7, lines 3-17; and that the recited sequences are specific portions or fragments of SEQ ID NO: 113 which is supported by the sequence listing and figures.

Upon entry of this amendment, claims 1-11 and 15-21 will be pending in the application. Any canceled subject matter is made without prejudice or disclaimer for filing in one or more

continuing applications. In view of the following remarks, Applicants respectfully request reconsideration and allowance of the pending claims.

I. Rejections under 35 U.S.C. §112, 1st paragraph

Claims 2-11, 17, and 18 stand rejected under 35 U.S.C. § 112, first paragraph for allegedly failing to comply with the written description requirement. With respect to claim 2, the Examiner states that the specification fails to describe any complements of SEQ ID NO: 12, SEQ ID NO: 60, SEQ ID NO: 113, or fragments thereof that retain functional promoter activity. She further states that the art teaches that most promoters function unidirectionally, and thus concludes that the written description requirement with respect to complements of the sequences as recited in claim 2 is not satisfied. Claims 3-11, 17, and 18 stand rejected for the same reasons as these claims depend on claim 2. Without agreeing with the rejection, claim 2 has been amended to delete complements of the recited sequences, thus making this rejection moot.

Regarding claim 18, the Examiner asserts that the specification does not disclose any 20-, 40-, 60-, 80-, or 100-mer that has vascular tissue-specific *E. grandis* cOMT promoter function, and thus the written description requirement is not met. Applicants respectfully traverse the rejection. It is noted that claim 18 is directed to isolated polynucleotide sequences of various lengths within SEQ ID NOS: 12 and 113. The claim does not require the sequences to have vascular tissue-specific cOMT promoter activity. While the Examiner is correct in noting that fragments longer than 119 base pairs may be used as functional cOMT promoters, the smaller fragments (20-100 base pairs) find use as probes and primers as described on page 18, line 28 to page 20, line 24 of the specification. Both SEQ ID NOS: 12 and 113 are disclosed in the specification as well as a definition of "x-mer", namely a sequence comprising at least "x" number of contiguous residues of either SEQ ID NO: 12 or SEQ ID NO: 113. Thus, the sequence of any of the claimed x-mers can be obtained from the disclosure in the specification by identifying a polynucleotide of a specified length contained within SEQ ID NOS: 12 and 113.

Applicants submit that the written description requirement is satisfied when a patent specification describes the claimed invention in sufficient detail to convey to one skilled in the art that the inventor had possession of the claimed invention as of the application filing date (see MPEP 2163, Section I.) An applicant may show possession of the invention by disclosure of sufficiently detailed, relevant identifying characteristics, i.e., complete or partial structure, other

physical and/or chemical properties, functional characteristics when coupled with a known or disclosed correlation between function and structure, or some combination of such characteristics (MPEP 2163, Section II, A. 3a.). In the instant case, the specification discloses the complete structure (e.g. sequence) of the claimed polynucleotides. Thus, Applicants submit that the written description is met and respectfully request that the rejection of the claims under § 112, first paragraph be withdrawn.

II. Rejections under 35 U.S.C. §112, 2nd paragraph

Claims 7, 15, 16, and 18 stand rejected under 35 U.S.C. § 112, second paragraph for allegedly being indefinite and failing to particularly point out and distinctly claim the subject matter which is regarded as applicants' invention. With respect to claim 7, the Examiner states the claim is indefinite because it is unclear how a DNA sequence of interest can be present in a construct in both a sense and anti-sense orientation at the same time. Claim 7 has been amended to specify that the DNA sequence of interest is a RNAi construct and no longer refers to a particular orientation of the DNA sequence of interest.

With respect to claim 15, the Examiner believes the claim is indefinite because it is unclear from the claim language whether the gene to be identified is an endogenous gene of the plant or a transgene introduced into the plant. The Examiner further states that the claim fails to recite essential steps. The claim requires the introduction of a construct comprising a *E. grandis* cOMT promoter and the Examiner states that is not readily apparent how introduction of such a construct would affect the phenotype of plant such that a gene involved in secondary wall formation could be identified. Claim 16 is rejected for the same reasons as it depends on claim 15. Claim 15 has been amended to clarify that a plant is transformed with a genetic construct comprising a vascular tissue-specific *E. grandis* cOMT promoter, a DNA sequence of interest, and a gene termination sequence, and that the DNA sequence of interest in the genetic construct of claim 4 expresses or encodes the gene in the cultivation step that is responsible for the desired function or phenotype in the transgenic plant. Claim 15 has been further amended to delete the phrase "wherein the gene encodes a polypeptide involved in secondary cell wall formation". Applicants submit that claim 15 as amended is clear and the metes and bounds of the claim can be established.

With regard to claim 18, the Examiner states that the dependency of claim 18 on claim 2 renders the claim indefinite since one of the sequences recited in claim 2 is only 119 base pairs long and it is not possible to have a 120-mer....600-mer of this short sequence. Claim 18 has been amended to clarify that the isolated polynucleotides are x-mers of either SEQ ID NO: 12 or SEQ ID NO: 113.

In view of the above remarks, Applicants request that the rejection of claims 7, 15, 16, and 18 under § 112, second paragraph be withdrawn.

CONCLUSION

This reply is fully responsive to the Office Action dated February 28, 2008. In view of the above amendments and remarks, it is believed that the present set of claims are now in condition for allowance. If, in the opinion of the Examiner, a further telephonic conference would expedite any minor issues with regard to the pending claims, the Examiner is invited to call the undersigned practitioner.

Except for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-1283.

Respectfully submitted,

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